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ARBOREAL GECKOS FEEDING ON PLANT SAP

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Several individuals of the gecko *Gehyra variegata* may be captured from the same position on the trunks of shrubs. This observation was made after dusk during a population study of this species and *Oedura reticulata* at Konnongorring in the wheatbelt about 150 km north-east of Perth, Western Australia (How and Kitchener 1983).

Further investigations of these aggregations in November 1984 revealed that they occurred on Jam (*Acacia acuminata*) where fresh sap was exuding from crevices in the trunk. On 13 November during a three hour period nine *Gehyra* were collected from the same position. Observation with a headtorch showed that they were licking and drinking the clear, fresh exudation. Four of the seven adult females were gravid.

Aggregations of three or more animals on *Acacia acuminata* were recorded on four different occasions in November 1983, twice in March 1985 and once in December 1984, January 1984 and 1985 and February 1982. In all but one instance, females outnumbered males (total animals - 47 female, 36 male); however, on 24 November 1983 one aggregation consisted of only six males.

The breeding season for *Gehyra* at Konnongorring is late-October to February (unpublished data) and there is evidence that a female produces more than one single-egg clutch. The sap may provide the geckos with more energy with which they can catch protein-rich arthropods. A high protein diet during this period may facilitate rapid growth in yolky ovarian follicles and oviducal eggs and may be necessary for production of successive clutches.

When *Gehyra* that had been feeding on sap were handled they released large amounts of dark treacly faecal material. The production of similar faeces by *Oedura reticulata* has been noted, suggesting that they may also feed on some sugary substances.

On 13 January 1985 an *Oedura* was observed capturing a de-alate queen *Camponotus* ant on the trunk of a Gimlet tree, *Eucalyptus salubris*. However the gecko was disturbed and it was not possible from observation to determine whether that species actually eats ants. *Camponotus* ants were common on trunks of Gimlet trees. They are mainly nocturnal and some are known to gather honey-dew and nectar which regurgitate to be stored in the distended crops of special worker ants in nests below ground (Brown and Taylor 1970). The possibility that *Oedura* may induce the ants to regurgitate upon capture is worth investigation.

Several authors (e.g. Scott 1981, Lamont 1983) have commented on ants feeding on nectar produced by extrafloral nectaries on native plants. It is possible that these extrafloral nectaries may be harvested by geckos also.

The Marbled Gecko, *Phyllodactylus marmoratus*, is frequently recorded among the blossom of Marri, *Eucalyptus calophylla*, during February and March in the south-west of Western Australia. I have not determined whether they feed on nectar or on insects attracted by the blossoms. *Phyllodactylus* will lick and dissolve portions of sugary sweets left uncovered (T.F. Houston, pers. comm.).

All published detailed studies on Australian geckos (Pianka and Pianka 1976, and Bustard 1968, 1971) and our unpublished studies as well as general texts indicate that their food items are exclusively arthropods. These studies have been based on analysis of stomach contents composed of solid material; the presence of sap or nectar in stomach fluids would thus have been ignored. A reappraisal of the diet of arboreal Australian geckos is warranted.

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OBSERVATIONS OF THE DISTRIBUTION OF THE NEW ZEALAND FUR SEAL (*ARCTOCEPHALUS FORSTERI*) IN WESTERN AUSTRALIA

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INTRODUCTION

Existing publications indicate that the present distribution of the New Zealand Fur Seal in Western Australia extends from the islands of the Archipelago of Recherche across to Eclipse Island off Albany (King 1969; Abbott 1979; Marlow and King 1974; King 1983; Bonner 1981).

This report deals with the sightings over a three year period of an increasing number of fur seals on a rocky outcrop approximately 300m south of Flinders Island (115°12'E 34°25'S), 8 km S.E. of Cape Leeuwin (Fig. 1). This represents the first recorded sighting of this species in this area since Irwin in 1832 and Clarke in 1842 (Abbott 1979).



Figure 1. New Zealand Fur Seals on a rocky outcrop in the Cape Leeuwin area.

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